

WHAT IS CLAIMED IS:

1. In a network support infrastructure that receives packet data from mobile terminals, a method for processing packet data, comprising:

receiving a packet channel request message comprising an emergency indication from a mobile terminal;

5 transmitting a packet uplink assignment message to the mobile terminal;

receiving the packet data via an uplink of a packet data channel;

determining a destination address for the packet data, the destination address identifying an emergency service entity; and

10 forwarding the packet data to the emergency service entity identified by the destination address.

2. The method of claim 1, wherein the determining a destination address for the packet data comprises:

accessing a database comprising a plurality of destination addresses associated with a plurality of emergency service entities, and

5 selecting the destination address from the database.

3. The method of claim 2, wherein the selecting the destination address from the database further comprises:

selecting the destination address based on information relating to a location of the mobile terminal transmitting the packet data.

4. The method of claim 1, wherein the mobile terminal transmits the packet data without being registered with the network support infrastructure for mobility management and without having an active packet data protocol context stored by the network support infrastructure.

5. The method of claim 1, further comprising:
processing additional packet data received from the mobile terminal that does not comprise an emergency indication in accordance with non-emergency processing rules.

6. The method of claim 1, further comprising:
receiving packet data from the emergency service entity; and
forwarding the packet data to the mobile terminal.

7. A system for receiving and forwarding emergency packet data, comprising:
a base station that:

receives a packet channel request message comprising an emergency indication
from a mobile terminal, and

5 transmits an uplink assignment message to the mobile terminal;

a first node that:

receives the emergency packet data via an uplink of a packet data channel, and
forwards the emergency packet data and the emergency indication; and

a second node that:

10 receives the emergency packet data and the emergency indication from the
first node,

determines a destination address for the emergency packet data, the
destination address identifying an emergency service entity, and

forwards the emergency packet data to the emergency service entity

15 identified by the destination address.

8. The system of claim 7, further comprising:

a database comprising a plurality of destination addresses associated with a plurality of
emergency service entities, and

wherein when determining a destination address for the emergency packet data, the

5 second node accesses the database and selects the destination address from the database.

9. The system of claim 8, wherein when selecting the destination address from the
database, the second node selects the destination address based on information relating to a
location of the mobile terminal transmitting the emergency packet data.

10. The system of claim 7, wherein the second node:

receives packet data from the emergency service entity, and

forwards the packet data to the mobile terminal.

11. The system of claim 7, wherein the first node comprises a serving general packet
radio service (GPRS) support node (SGSN) and the second node comprises a gateway GPRS
support node (GGSN).

12. The system of claim 7, wherein the first node further:

identifies an international mobile subscriber identity (IMSI) associated with the mobile
terminal as being in a ready state, after receiving the emergency packet data.

13. The system of claim 12, wherein the first node further:

starts a timer after receiving the emergency packet data, the timer set to a time period associated with processing the emergency packet data,

transmits a notification to the second node if the time period is reached, and

5 identifies the IMSI associated with the mobile terminal as being in an idle state, if the time period is reached.

14. A mobile terminal, comprising:

a transmit device that transmits a packet channel request message comprising an emergency indication;

5 a receive device that receives a packet uplink assignment that assigns at least one radio block on an uplink of a packet data channel to the mobile terminal; and

processing logic that forwards emergency packet data to the transmit device, wherein the transmit device transmits the emergency packet data using logical link control layer protocol data units.

15. The mobile terminal of claim 14, wherein the receive device receives packet data from an emergency service entity in response to transmitting the emergency packet data.

16. The mobile terminal of claim 14, wherein the mobile terminal transmits the emergency packet data without being registered with network support infrastructure and without having an active packet data protocol context stored in the network support infrastructure.

17. A system for receiving and forwarding packet data, comprising:

a base station that receives an emergency packet channel request message from a mobile terminal and transmits an uplink assignment message to the mobile terminal;

a serving general packet radio service (GPRS) support node (SGSN) that receives packet data via an uplink of a packet data channel and forwards a payload portion of the packet data and an emergency indication; and

a GGSN that receives the payload portion of the packet data and the emergency indication from the SGSN, determines a destination address for the packet data, the destination address identifying an emergency service entity, and forwards the packet data to the emergency service entity identified by the destination address.

18. The system of claim 17, wherein the mobile terminal transmits the packet data to the SGSN using logical link control (LLC) layer protocol data units (PDUs) and the SGSN forwards the payload portion and the emergency indication to the GGSN using Internet Protocol (IP) layer PDUs.

19. The system of claim 18, wherein the GGSN forwards the payload portion to the emergency service entity via a network using IP layer PDUs.

20. The system of claim 17, wherein the GGSN receives packet data from the emergency service entity and forwards the packet data to the mobile terminal via the SGSN.

21. The system of claim 17, wherein the SGSN identifies the mobile terminal as being in a ready state after receiving the payload portion of the packet data and the emergency

indication, the ready state indicating that the mobile terminal is able to use network-related services to receive packet data.

22. The system of claim 21, wherein the SGSN starts a timer after receiving the payload portion of the packet data and the emergency indication and restarts the timer when packet data from the emergency service entity is received by the SGSN.

23. The system of claim 22, wherein the SGSN identifies the mobile terminal as being in an idle state when the timer reaches a predetermined value.

24. The system of claim 17, further comprising:

a database comprising a plurality of destination addresses associated with a plurality of emergency service entities, and

wherein when determining a destination address for the packet data, the GGSN selects
5 the destination address from the database based on a location of the SGSN from which it received the packet data and the associated emergency indication.

25. In a network comprising a mobile terminal, a base station, at least two network support nodes and at least one emergency service entity, a method for processing an emergency packet transaction, comprising:

transmitting a packet channel request message comprising an emergency indication from
5 the mobile terminal to the base station;

transmitting a packet uplink assignment message from the base station to the mobile terminal in response to receiving the packet channel request message;

transmitting packet data on an uplink of a packet data channel;

- receiving the packet data at a first network support node;
- 10 determining whether the packet data relates to an emergency message;
- forwarding the packet data and the emergency indication to a second network support node, when the packet data relates to the emergency message;
- determining a destination address for the packet data, the destination address identifying an emergency service entity; and
- 15 transmitting the packet data to the emergency service entity identified by the destination address.

26. The method of claim 25, further comprising:

receiving packet data from the emergency service entity; and

forwarding the packet data to the mobile terminal via the first and second network support nodes.

27. A system, comprising:

- a mobile terminal that transmits packet data and an emergency indication relating to the packet data;
- a first node that receives the packet data and the emergency indication and forwards the
- 5 packet data and the emergency indication; and
- a second node that receives the packet data and the emergency indication from the first node, determines a destination address for the packet data, the destination address identifying an emergency service entity and forwards the packet data to the emergency service entity identified by the destination address.

28. A computer-readable medium having stored thereon a plurality of sequences of instructions, which when executed by at least one processor, cause said processor to perform a method for processing packet data comprising:

receiving a packet channel request message comprising an emergency indication from a

5 mobile terminal;

transmitting an uplink assignment message to the mobile terminal;

receiving packet data and the emergency indication;

accessing a database comprising a plurality of destination addresses associated with a plurality of emergency service entities;

10 selecting a destination address for the packet data from the database; and

forwarding the packet data and the emergency indication to the emergency service entity identified by the destination address.

29. The computer-readable medium of claim 28, wherein the selecting a destination address for the packet data comprises:

selecting the destination address based on information relating to a location of the mobile terminal.

30. A network device for receiving and forwarding packet data comprising:

a memory for storing instructions for processing emergency packet data; and

a processing device that receives an emergency packet channel request message from a mobile terminal, transmits an uplink assignment message to the mobile terminal,

5 receives emergency packet data via an uplink of a packet data channel, determines a destination address for the emergency packet data, where the destination address

identifies an emergency service entity, and forwards the emergency packet data to the emergency service entity.